

ABSTRACT

A METHOD OF DECOMPOSING A THERMOSETTING RESIN

A method of decomposing a thermosetting resin by a decomposer comprising the steps of: pre-heating the thermosetting resin up to a pre-heating temperature T0; kneading the pre-heated thermosetting resin together with a decomposer, and concurrently heating a mixture comprising the thermosetting resin and the decomposer up to a kneading temperature T1, thereby allowing a reaction to take place between the decomposer and the thermosetting resin to obtain a kneaded matter wherein the decomposer becomes consumed; and heating the kneaded matter to a maximum temperature T2 to thereby decompose the thermosetting resin; wherein the preheating temperature T0 is not higher than the boiling temperature of the decomposer; the kneading temperature T1 is not lower than the pre-heating temperature T0 but is lower than the thermal decomposition temperature of the thermosetting resin; the maximum temperature T2 is lower than the decomposition temperature of the thermosetting resin; and the pre-heating of the thermosetting resin is performed under the following conditions of temperature T0 and time t:

$$100^{\circ}\text{C} \leq T0 < 260^{\circ}\text{C}$$

$$0.5 \text{ min} \leq t \leq 7 \text{ min.}$$

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